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Mycena pseudoinclinata, new to Italy

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Abstract – The first report of *Mycena pseudoinclinata* in Italy is accompanied by notes on the taxonomy, ecology, and distribution of this uncommon basidiomycete.

Key words – *Mycenaceae*, sect. *Fragilipedes,* basidiomycetes

Introduction

Mycena pseudoinclinata (*Mycenaceae* Overeem) belongs to sect. *Fragilipedes* (Fr.) Quél., which is considered the largest section in *Mycena* (Pers.) Roussel. The species was originally described by Smith (1947), who distinguished it from *M. inclinata* (Fr.) Quél. by the presence of both pleurocystidia and cheilocystidia and absence of (or fewer) fibrillose flecks on the stipe. This taxon has a limited distribution all over the world, particularly in Europe where it has recently been recorded only in Switzerland and France (Robich 2003). This paper deals with the first record of *M. pseudoinclinata* in Italy, which we recently collected in a reforested area in the neighborhood of the town of Palermo (Sicily).

Materials & methods

Basidiomata were identified while fresh and microscopic features were observed in H_2O using a Leica DMLB microscope; spore measurements were based on 100 observations. Nomenclature follows the Index Fungorum (http://www.indexfungorum.org/Names/Names.asp). The description of the characteristics of the species is based on personal observations that were subsequently compared with the descriptions given by Smith (1947) and Robich (2003). The collection is stored in the fungal dried reference collection of the Herbarium Mediterraneum Panormitanum, Palermo (PAL).

Taxonomy

Mycena pseudoinclinata A.H. Sm., North Amer. Species *Mycena*: 327. 1947.

Figs. 1B, 2

Pileus 20–30 mm, ash-gray, conical to campanulate, pruinose, surface moist and glabrous, disc slightly umbonate, margin striate. Lamellae close, white, notched, margin concolorous to the face of lamellae; lamellulae present. Stipe 70 × 3 mm, fragile, hollow, almost concolorous with the pileus, darker at the base with a slight whitish felt. Flesh typically with a farinaceous odor and taste.

Basidiospores 8–10 × 6–6.5 µm, ellipsoid to broadly ellipsoid, smooth, amyloid. Basidia, 30–35 × 7.5–8.5 µm, tetrasporic, claviform. Cheilocystidia 20–60 × 9–12 µm, claviform, sphaerical-pedicellate, with irregular excrescences of different shapes ≤ 10–15 µm in length, well-spaced. Epicutis composed of cylindrical hyphae, smooth, 2–5 µm diam., with terminal elements 50–70 × 2–6 µm. Subhymenial layer with sub-globose hyphae, isodiametric, 3–8 µm diam. Hyphae of stipe cylindrical, innermost 8–25 µm and outermost 1.5–2.5 µm diam., smooth or with sparse excrescences, dextrinoid.

Collection examined: **ITALY**. **Sicily**: Raffo Rosso, neighborhood in Palermo, 423 m, on rotten trunks of *Eucalyptus camaldulensis* Dehnh. (*Myrtaceae*), 13 Jan 2011, GPS: 38°10′46″N 13°15′40″E, coll. R. Compagno & A. La Rosa (PAL 960).

Comments — Robich (2003) included mycenas with large basidiomata in sect. *Mycena*. Some species that might be confused with others in sect. *Filipedes* (Fr.) Quél. or *Fragilipedes* can be differentiated by their basidioma shape and cheilocystidial type. Mycenas in sect. *Fragilipedes* are primarily differentiated through cheilocystidial and/or pleurocystidial shapes, here the main character differentiating *M. pseudoinclinata* is the numerous large irregular protuberances on the cheilocystidia. Although Smith (1947) referred to pleurocystidia in his original description of *M. pseudoinclinata*, Maas Geesteranus (1988a,b) correctly described this species as lacking them. Robich, who cited the cheilocystidia as restricted to the lamellar edge (Robich 2003), includes the species in his revised key to *Mycena* sect. *Fragilipedes* of the northern hemisphere.

Smith (1947) first reported *M. pseudoinclinata* as densely cespitose and occurring in Tennessee, Pennsylvania, and Michigan (U.S.A.). Bi et al. (1993) report the species from China on fallen twigs in broad-leaved woods. In Europe Gerault (2005) reports the species from France and Switzerland in broad-leaved forests mainly characterized by oaks.

We found that *M. pseudoinclinata* also grows in *Eucalyptus* plantations (Fig. 1A) and confirm its role in decaying wood and its typical cespitose habit, as demonstrated by our collection of eight connate basidiomata per trunk (Fig. 1B). The literature notes that *M. pseudoinclinata* fruits from spring (April) through autumn; in Sicily we have collected basidiomata as early as January, no

Fig. 1: *Mycena pseudoinclinata*.
A. Habitat in *Eucalyptus camaldulensis* plantation. B. Basidiomata.

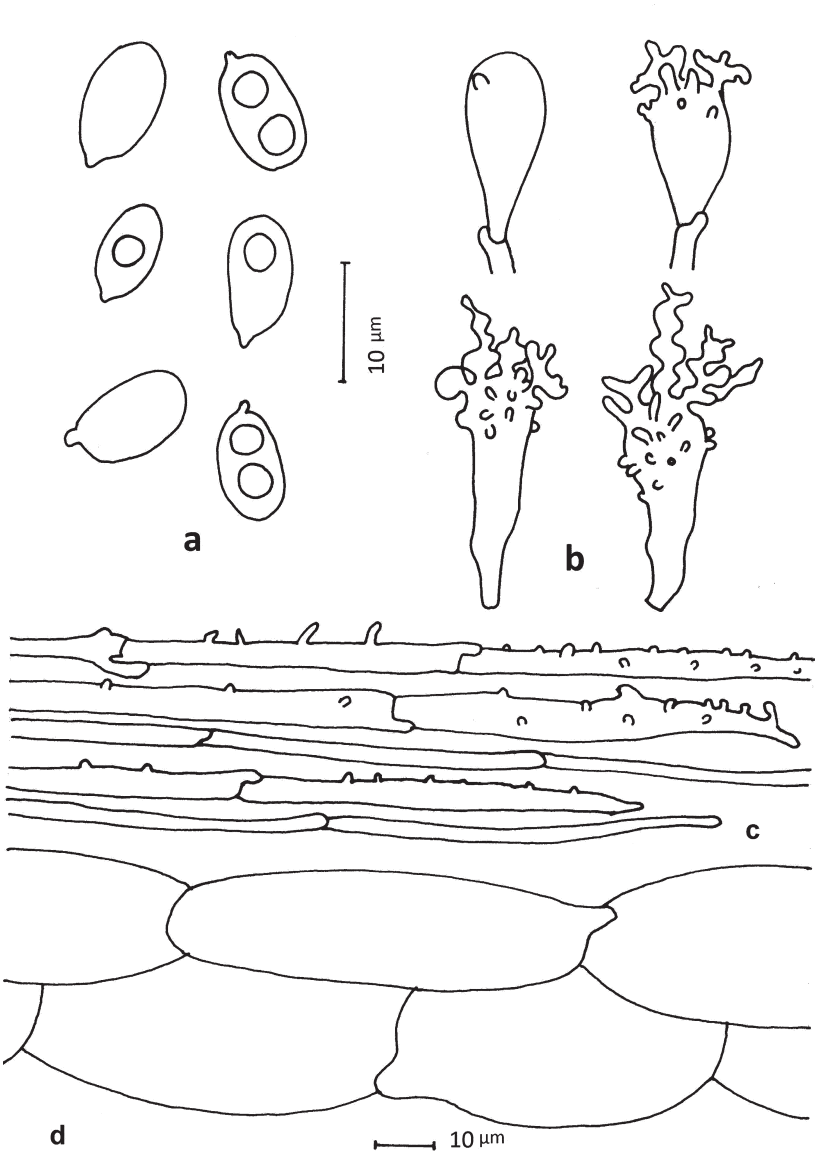

Fig. 2: *Mycena pseudoinclinata* (PAL 960(Mic)].
a. Basidiospores. b. Claviform cheilocystidia with irregular excrescences of different shapes. c. Epicutis with cylindrical hyphae. d. Vesiculose and swollen hyphae in the pileitrama.

doubt due to the mild weather conditions on the island. Our report represents the southernmost limit of its distribution in Europe.

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Literature cited

Bi ZS, Zheng GY, Li TH. 1993. The macrofungus flora of China's Guangdong Province. The Chinese University Press, Shatin, N.T., Hong Kong. 737 p.

Gerault A. 2005. Florule evolutive des *Basidiomycotina* du Finistère. *Heterobasidiomycetes*. *Tricholomatales*. Vers. 2.1. 205 p. http://projet.aulnaies.free.fr/Florules/TRICHOLOMATALES.pdf

Maas Geesteranus RA. 1988a. Conspectus of the mycenas of the northern hemisphere – 9. Section *Fragilipedes*, species A–G. Proc. Kon. Ned. Akad. Wetensch., Ser. C, 91: 43–83.

Maas Geesteranus RA. 1988b. Conspectus of the mycenas of the northern hemisphere – 9. Section *Fragilipedes*, species I–R. Proc. Kon. Ned. Akad. Wetensch., Ser. C, 91: 129–159.

Robich G. 2003. *Mycena* d'Europa. Associazione Micologica Bresadola, Trento. 728 p.

Robich G. 2006. A revised key to the species of *Mycena*, section *Fragilipedes* of Northern hemisphere. Persoonia 19: 143.

Smith AH. 1947. North American species of *Mycena.* Ann. Arbor: University of Michigan Press. London: Geoffrey Cumberlege, Oxford University Press. 521 p.